

**In the Specification:**

Replace the paragraph beginning at page 69, line 8, with the following rewritten paragraph:

The SalI cohesive end was made blunt-ended using the large fragment of DNA polymerase I. Then the plasmid was digested with PstI and ligated to a DNA fragment coding for the ER targeting signal from the basic endochitinase gene [ *Arabidopsis thaliana* ]

ATGAAGACTAATCTTTTTCTCTTTCTCATCTTTTCA

CTTCTCCTATCATTATCCTCGGCCGAATTC (SEQ ID NO: 10), and vacuolar targeting signal from Tobacco chitinase A:

GATCTTTTAGTCGATACTATG (SEQ ID NO: 11) digested with SmaI and PstI.

Replace the paragraph beginning at page 69, line 21, with the following rewritten paragraph:

\*pGREENII - obtained from Dr. P. Mullineaux [Roger P. Hellens et al., (2000) Plant Mol. Bio. 42:819-832]. Expression from the pGREEN II vector is controlled by the 35S promoter from Cauliflower Mosaic Virus (SEQ ID NO: 9), the TMV (Tobacco Mosaic Virus) omega translational enhancer element and the octopine synthase terminator sequence from *Agrobacterium tumefaciens*.

Replace the paragraph beginning at page 70, line 11, with the following rewritten paragraph:

The cDNA coding for hGCD (ATTC clone number 65696) (SEQ ID NO'S: 7 and 8) was amplified using the forward: 5' CAGAATTCGCCCCGCCCCTGCA 3' (SEQ ID NO: 3) and the reverse: 5' CTCAGATCTTGGCGATGCCACA 3' (SEQ ID NO: 4) primers. The purified PCR DNA product was digested with endonucleases EcoRI and BglII (see recognition sequences underlined in the primers) and ligated into an intermediate vector having an expression cassette E-T digested with the same enzymes. The expression cassette was cut and eluted from the intermediate vector and ligated into the binary vector pGREENII using restriction enzymes SmaI and XbaI, forming the final expression vector. Kanamycine resistance is conferred by the NPTII gene driven by the nos promoter obtained together with the pGREEN vector (Fig. 11B). The resulting expression cassette (SEQ ID NO: 13) is presented by Fig. 11A.

Replace the paragraph beginning at page 70, line 23, with the following rewritten paragraph:

The resulting plasmid was sequenced to ensure correct in-frame fusion of the signals using the following sequencing primers: 5' 35S promoter: 5' CTCAGAAGACCAGAGGGC 3' (SEQ ID NO: 5), and the 3' terminator: 5' CAAAGCGGCCATCGTGC 3' (SEQ ID NO: 6).

Replace the paragraph beginning at page 72, line 16, with the following rewritten paragraph:

An about 1cm callus of genetically modified carrot cells containing the rh-GCD gene (SEQ ID NO's: 13 and 14) was plated onto Murashige and Skoog (MS) 9cm diameter agar medium plate containing 4.4gr/l MSD medium (Duchefa), 9.9mg/l thiamin HCl (Duchefa), 0.5mg folic acid (Sigma) 0.5mg/l biotin (Duchefa), 0.8g/l Casein hydrolisate (Duchefa), sugar 30g/l and hormones 2-4 D (Sigma). The callus was grown for 14 days at 25°C.